

IN THE CLAIMS:

Please amend the claims as follows:

1. (Currently Amended) Test switching circuit for a high speed data interface (1) of an integrated circuit comprising switching transistors (~~T1-T6~~) which switch in a test mode a termination resistor output stage (15) of a data transmission signal path (17) to a termination resistor input stage (18) of a data reception signal path (25) to form an internal feedback test loop within said integrated circuit.
2. (Currently Amended) The test switching circuit according to claim 1 wherein the test switching circuit (26) is connected to a configuration register (29).
3. (Currently Amended) The test switching circuit according to claim 1 wherein the termination resistor output stage (15) is programmable.
4. (Currently Amended) The test switching circuit according to claim 1 wherein the termination resistor input stage (18) is programmable.
5. (Currently Amended) The test switching circuit according to claim 1 wherein the controllable test switching circuit (26) comprises: a first transistor (~~T1~~) connected to said termination resistor output stage (15) of the data transmission signal path (17); a second transistor (~~T2~~) connected between said first transistor (~~T1~~) and a reference potential node (GND); a third transistor (~~T3~~) connected between said reference potential node (GND) and a sixth transistor (~~T6~~); a fourth transistor (~~T4~~) connected between said first transistor (~~T1~~) and a test node (35); a fifth transistor (~~T5~~) connected between said test node (35) and said sixth transistor (~~T6~~); wherein the sixth transistor (~~T6~~) is connected to said termination resistor input stage (18) of the data reception signal path (25).
6. (Currently Amended) The test switching circuit according to claim 5 wherein the transistors (~~T1-T6~~) are formed by MOSFETs.
7. (Currently Amended) The test switching circuit according to claim 6 wherein the gate terminals of the transistors (~~T1-T6~~) are controlled by control bits (~~C1-C6~~) stored in said configuration register (29).
8. (Currently Amended) The test switching circuit according to claim 5 wherein in a normal operation mode of said integrated circuit the first transistor (~~T1~~) is switched off, the second transistor (~~T2~~) is switched on, the third transistor (~~T3~~) is switched on, the fourth transistor (~~T4~~) is switched off, the fifth transistor (~~T5~~) is switched off and the sixth transistor (~~T6~~) is switched off.

9. (Currently Amended) The test switching circuit according to claim 5 wherein in a feedback test mode of said integrated circuit the first transistor ( $T_1$ ) is switched on, the second transistor ( $T_2$ ) is switched off, the third transistor ( $T_3$ ) is switched off, the fourth transistor ( $T_4$ ) is switched on, the fifth transistor ( $T_5$ ) is switched on and the sixth transistor ( $T_6$ ) is switched on.

10. (Currently Amended) The test switching circuit according to claim 5 wherein in a receiver test mode of said integrated circuit the first transistor ( $T_1$ ) is switched off, the second transistor ( $T_2$ ) is switched off, the third transistor ( $T_3$ ) is switched off, the fourth transistor ( $T_4$ ) is switched off, the fifth transistor ( $T_5$ ) is switched on and the sixth transistor ( $T_6$ ) is switched on.

11. (Currently Amended) The test switching circuit according to claim 5 wherein in a transmitter test mode of said integrated circuit the first transistor ( $T_1$ ) is switched on, the second transistor ( $T_2$ ) is switched off, the third transistor ( $T_3$ ) is switched off, the fourth transistor ( $T_4$ ) is switched on, the fifth transistor ( $T_5$ ) is switched off and the sixth transistor ( $T_6$ ) is switched off.

12. (Currently Amended) The test switching circuit according to claim 5 wherein the controllable test switching circuit ( $26$ ) is fully differential.

13. (Currently Amended) A high speed data interface ( $1$ ) within an integrated circuit ( $IC$ ) comprising:

- (a) a transmitting signal path ( $17$ ) for transmitting data via a data transmission line which is connected to a termination resistor output stage ( $15$ ) of said data transmission signal path ( $17$ ), wherein the termination resistor output stage ( $15$ ) is provided for adapting the output impedance of said data transmission signal path ( $17$ ) to a load connected to said transmission data line;
- (b) a reception data signal path ( $25$ ) for receiving data via a data reception line, which is connected to a termination resistor input stage ( $18$ ) of said data reception signal path ( $25$ ), wherein the termination resistor input stage ( $18$ ) is provided for adapting the input impedance of said data reception signal path ( $25$ ) to a load connected to said reception data line; and
- (c) a controllable test switching circuit ( $26$ ) comprising switching transistors ( $T_1-T_6$ ) for switching in a test mode the termination resistor output

stage (15) to the termination resistor input stage (18) to form an internal feedback test loop within said integrated circuit.

14. (Currently Amended) Integrated circuit having several high speed data interfaces (1), wherein each high speed data interface comprises:

- (a) a transmitting signal path (17) for transmitting data via a data transmission line which is connected to a termination resistor output stage (15) of said data transmission signal path (17), wherein the termination resistor output stage (15) is provided for adapting the output impedance of said data transmission signal path (17) to a load connected to said transmission data line;
- (b) a reception data signal path (25) for receiving data via a data reception line, which is connected to a termination resistor input stage (18) of said data reception signal path (25), wherein the termination resistor input stage (18) is provided for adapting the input impedance of said data reception signal path (25) to a load connected to said reception data line; and
- (c) a controllable test switching circuit (26) comprising switching transistors ( $T_1 - T_6$ ) for switching in a test mode the termination resistor output stage (15) to the termination resistor input stage (18) to form an internal feedback test loop within said integrated circuit.